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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,804	02/08/2002	Youichirou Sugino	04558/063001	3655

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EXAMINER

CHOWDHURY, TARIFUR RASHID

ART UNIT PAPER NUMBER

2871

DATE MAILED: 05/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/072,804

pplicant(s)

SUGINO ET AL.

Examiner

Tarifur R Chowdhury

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/03/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,2,6-11 and 15-27 is/are rejected.
- 7) ☒ Claim(s) 3-5 and 12-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. **Claims 1, 2, 6-11 and 15-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu et al., (Shimizu), US 2002/0102369.**

5. Shimizu discloses a polarizing plate used in a liquid crystal display wherein the polarizer comprising a polarizer, wherein all surfaces and sides of the polarizer are covered with low moisture-permeably layers having moisture permeability of not more

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than $250 \text{ g/m}^2 \cdot 24\text{h}$ (overlaps the claimed range a less than $310 \text{ g/m}^2 \cdot 24\text{h}$) (page 1, paragraph 0001; page 2, paragraph 0019 & 0025) and thus would have been obvious (See In re Malagari, 499 F.2d 197, 182 USPQ 549 (CCPA 1974)).

Further, Shimizu also discloses that the liquid crystal display comprising a liquid crystal cell having a first side and a second side and a polarizer attached to at least one side of the liquid crystal cell (page 4, paragraph 0072).

Accordingly, claims 1 and 10 would have been obvious.

As to claims 2, 11, 21 and 22, Shimizu discloses that the rate of change in dimension of the polarizer in a uniaxially stretching direction is $\pm 0.3\%$ after the polarization is left at a temperature of 80°C and humidity of 95% for 50 hours (page 16, paragraph 0162). Therefore, it would have at least been obvious to one of ordinary skill in the art that the rate of change in dimension of the polarizer in a uniaxially stretching direction is $\pm 0.1\%$ or less after the polarization is left at a temperature of 60°C and humidity of 95% for 100 hours since less temperature and more time would provide optimum (desired) result.

As to claims 19 and 20, the moisture-permeability disclosed by Shimizu such as not more than $250 \text{ g/m}^2 \cdot 24\text{h}$ overlaps the claimed range at $120 \text{ g/m}^2 \cdot 24\text{h}$ or less or at $0.59 \text{ g/m}^2 \cdot 24\text{h}$ or less and thus would have been obvious (See In re Malagari, 499 F.2d 197, 182 USPQ 549 (CCPA 1974)).

As to claims 23-27, Shimizu discloses that the polarizer is a absorbing type linear polarizer wherein the polarizer comprises a polyvinyl alcohol film (page 19, paragraph 0195).

As to claims 6-9, 15-18, attaching either a reflector or a transflector to obtain a reflective polarizer or a retarder or a viewing angle compensation film to increase viewing angle characteristics or a brightness enhancement film obtain a brighter screen to the polarizing plate is considered as intended use and thus would have been obvious.

Allowable Subject Matter

6. Claims 3-5 and 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

The prior arts of record do not anticipate or render obvious to one skilled in the art a polarizing plate or a liquid crystal display comprising the polarizing plate wherein the polarizing plate is formed into a size of 90 mm * 90 mm and attached to a plastic cell having a size of 100 mm * 100 mm and a thickness of 400 micro meters, the plastic cell comprising at least one selected from the thermoplastic resin and a thermosetting resin, and when the cell is left at a temperature of 60° C and a humidity of 95% for 100 hours, an amount of warping at each of four corners of the cell is ± 3.0 mm or less, including all other recitation of the base claim.

Claims 4, 5, 13 and 14 are objected due to their dependency.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

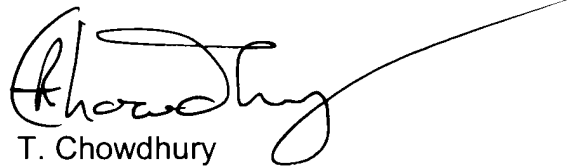
- a) US 2003/0002154 is related to polarizers coated with optically functional layers such as reflector, transflector, retarder, viewing angle film, diffuser etc.
- b) USPAT 4,617,207 is related to a thermoplastic resin sheet having a thermal shrinkage within $\mp 0.3\%$.
- c) US 2002/0160172 is related to a protective film for a polarizing plate wherein a moisture permeability of the protective film is 50 to 250 g/m².24h.
- d) US 2003/0001987 is related to K-type polarizers for use with liquid crystal displays.
- e) US 2002/0192397 is related to a polarizing plate protective film wherein the moisture permeability of the protective film is 3-10 g/m².24h.
- f) JP 60-083903 is related to a polarizing element wherein the protective films have moisture permeability of 100 g/m².24h.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarifur R Chowdhury whose telephone number is (703) 308-4115. The examiner can normally be reached on M-Th (6:30-5:00) Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William L Sikes can be reached on (703) 305-4842. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7005 for regular communications and (703) 308-7724 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

A handwritten signature in black ink, appearing to read 'T. Chowdhury', with a long, sweeping horizontal line extending to the right.

T. Chowdhury
Primary Examiner
Technology Center 2800

TRC
April 29, 2003